



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/044,294	10/26/2001	Lawrence J. Karr	50037.65USU1/177809.2	7483

27488 7590 02/06/2004

MERCHANT & GOULD  
P.O. BOX 2903  
MINNEAPOLIS, MN 55402-0903

EXAMINER

NGUYEN, DUC M

ART UNIT	PAPER NUMBER
----------	--------------

2685

12

DATE MAILED: 02/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.  
10/044,294

Applicant(s)  
Karr

Examiner  
Duc M. Nguyen

Art Unit  
2685



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Oct 7, 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1, 40-42, and 44-60 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 40-42, and 44-60 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_ 6) ☐ Other:

Art Unit: 2685

### **DETAILED ACTION**

This action is in response to applicant's response filed on 10/7/03. Claims 1, 40-42, 44-60 are now pending in the present application. **This action is made final.**

#### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 50 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 50 recites the limitation "said encoder and said packet assembler" in lines 4-5 of the claim. There is insufficient antecedent basis for this limitation in the claim.

#### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2685

4. Claims **1, 40-42, 44-60** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Nagata et al** (US Pat No. **4,910,511**) in view of **Gaskill** (US Pat No. **5,757,782**).

Regarding claim **1**, **Nagata** discloses a wireless communication (paging) system having local and wide-area reception modes, wherein the radio paging receiver (mobile device) can receive two signals, one is used for local-area service, the other is for wide-area service (see col. 2, line 18 - col. 5, line 12). Here, since the paging communication system comprise local-area and wide-area reception modes, it is clear that the system obviously comprise a wide-area transmitter and a local-area transmitter in order to broadcast (or transmit) local-area signals or wide-area signals to pagers. However, although **Nagata** disclose two different channels are used for local-area and wide-area channels, **Nagata** fails to disclose such channels are FM subcarrier channels. However, in an analogous art, **Gaskill** discloses a paging system wherein different FM subcarrier channels are used for pager signals (see Abstract and col. 1, line 30 - col. 2, line 67). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the above teaching of **Gaskill** to **Nagata** for using FM subcarrier channels for local-area and wide-area broadcast modes as claimed, for providing a low cost pager system operating in multiple reception modes.

Regarding claim **40**, it is rejected for the same reason as set forth in claim **1** above, wherein it is clear that the system in **Nagata**'s reference obviously comprise a broadcast transmitter and a localcast transmitter as claimed, in order to broadcast (or transmit) local-area signals and wide-area signals to pagers.

Art Unit: 2685

Regarding claims **41-42**, they are rejected for the same reason as set forth in claim 1 above. In addition, since the use of two-way pager is well known in the art (Official Notice), it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the above teachings of **Gaskill** and **Nagata** for the device (pager) being able to transmit data to a localcast transmitter as claimed, for utilizing advantage provided by two-way transmission mode.

Regarding claims **44, 50**, they are rejected for the same reason as set forth in claim 1 above. In addition, since **Gaskill** disclose a broadcast transmitter comprising an encoder, a control processor and a subcarrier signal generator (see Figs. 6-7, col. 5, lines 18- 65) for encoding and transmitting digital data into control packets, data packets, subframes and frames at a subcarrier frequency, it is clear that such transmitter would obviously comprises components as recited in the claim, in order to encode and transmit digital data into control and data packets in subframes or frames.

Regarding claims **45-49, 51-55**, they are rejected for the same reason as set forth in claim 1 above. In addition, since such components as recited in the claims are known in the art (Official Notice), in order for a transceiver to receive input data, reassemble data into packets for transmission, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the above teachings of **Gaskill** and **Nagata** for provide components as claimed, in order for a transceiver being able to reassemble input data into packets for re-transmission.

Art Unit: 2685

Regarding claim **56**, it is rejected for the same reason as set forth in claim 42 above. IN addition, since such components as recited in the claim are known in the art (Official Notice), in order for a transceiver to receive and transmit data packets, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the above teachings of **Gaskill** and **Nagata** to provide components as claimed to the pager, in order to receive and transmit data packets in local-area mode.

Regarding claims **57-59**, they are rejected for the same reason as set forth in claim 42 above. In addition, since **Nagata** as modified would disclose a two-way pager, it is clear such pager would be able to receive or transmit a paging signal in a localcast mode to another pager in the local-area.

Regarding claim **60**, it is rejected for the same reason as set forth in claim 42 above. In addition, **Nagata** discloses the paging device receive both transmission modes using substantially the same circuitry (see Fig. 1 and col. 2, line 59 - col. 5, line 13).

### ***Response to Arguments***

5. Applicant's arguments with respect to claims 1, 40-42 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Art Unit: 2685

- **Yang** et al (US Pat. No. 6,088,577), Multiple subcarrier communication system.
- **Kaiser** et al (US Pat. No. 6,060,996), Pager broadcast system.

7. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

(703) 872-9314 (for formal communications intended for entry)

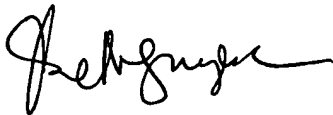
(for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,  
Arlington VA, Sixth Floor (Receptionist).

Any inquiry concerning this communication or communications from the examiner should be directed to Duc M. Nguyen whose telephone number is (703) 306-4531, Monday-Thursday. Or to Edward Urban (Supervisor) whose telephone number is (703) 305-4385.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4700.

Duc M. Nguyen



Jan 5, 2004